

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for hermetically packaging a ~~filter~~ bulk acoustic resonator device including the steps ~~of~~ of:

_____ providing a first wafer bearing having a first surface and a second surface that face toward opposite directions, with a plurality of bulk acoustic resonators (BARs), resonator devices disposed on the first surface, the first wafer further having a plurality of cavities that are formed at positions corresponding to the bulk acoustic resonator devices and are open at the second surface;

_____ providing a second wafer having a plurality of wells, wells;

_____ providing a third wafer;

_____ bonding the first and second wafers to each other second wafer to the first surface of the first wafer and bonding the third wafer to the second surface of the first wafer to form a composite wafer in which the BARs bulk acoustic resonator devices of the first wafer are aligned with the wells of the second wafer, wafer and sealed by the second wafer, and the cavities of the first wafer are sealed by the third wafer; and _____

_____ separating individual filters bulk acoustic resonator devices by sawing the composite wafer.

2. (Currently Amended) A method for ~~hermetically packaging electric filters comprising a plurality of thin film bulk acoustic resonators (FBARs) where each resonator is made up of~~ as claimed in claim 1, wherein each of the bulk acoustic resonator devices comprises a piezoelectric layer sandwiched between two metal electrodes and other layers of materials, by which the first wafer bearing a plurality of such FBAR filters is bonded to at least one other wafer, into which wells have previously been etched in the face to be bonded

~~to the face of the first wafer bearing the FBAR filters, said pair of wafers forming a composite wafer, said wells being aligned with one of said FBAR filters, the individual filters being separated after the wafers have been processed.~~

3. (Currently Amended) A method as claimed in claim 1 wherein holes are etched in the composite wafer and filled with metal to allow electrical contacts to be made to the filters bulk acoustic resonator devices.

4. (Currently Amended) A method as claimed in claim 1 wherein metal layers are deposited on the edges of ~~the filters chips~~ including the bulk acoustic resonator devices after they have been separated in order to allow electrical contacts to be made to the ~~filters~~ bulk acoustic resonator devices.

5. (Canceled)

6. (Presently Presented) A method as claimed in claim 1 wherein one or more of the wafer bonding processes is undertaken under a vacuum.

7. (Presently Presented) A method as claimed in claim 1 wherein one or more of the wafer bonding processes used is anodic bonding employing a borosilicate bonding layer.

8. (Previously Presented) A method as claimed in claim 1 wherein one or more of the wafer bonding processes used employs a glass as the bonding layer and the bond is made by a combination of heat and pressure.

9. (Presently Presented) A method as claimed in claim 1 wherein one or more of the wafer bonding processes used employs a metal or alloy as the bonding layer and the bond is made by a combination of heat and pressure.

10. (Currently Amended) A ~~filter~~ bulk acoustic resonator device made by the method according to claim 1.

11. (Currently Amended) A ~~filter~~ bulk acoustic resonator device according to claim 10 comprising ~~an FBAR filter~~ a piezoelectric layer sandwiched between two metal electrodes.

12. (Currently Amended) A ~~filter~~ bulk acoustic resonator device according to claim 11 ~~comprising: wherein each FBAR filter comprises a plurality of layers consisting of (from lower to upper):~~ a substrate, and a dielectric layer, one ~~or more~~ of the metal electrodes, ~~layers acting as a lower electrode, a~~ piezoelectric layer, and the other one or more of the metal electrodes ~~layers acting as an upper electrode~~ that are stacked one by one on the substrate.

13. (Currently Amended) A ~~filter~~ bulk acoustic resonator device according to ~~claim 12~~ claim 12, further ~~comprises~~ comprising a top layer which can be either a conductor or an insulator.

14. (Canceled)

15. (New) A method for hermetically packaging a bulk acoustic resonator device including the steps of:

providing a first wafer having a first surface and a second surface that face toward opposite directions, with a plurality of bulk acoustic resonator devices disposed on the first surface;

providing a second wafer having a plurality of wells;

bonding the second wafer to the first surface of the first wafer to form a composite wafer in which the bulk acoustic resonator devices of the first wafer are aligned with the wells of the second wafer and sealed by the second wafer;

forming holes in the composite wafer after formation of the composite wafer so that the holes reach metal tracks connected to the bulk acoustic resonator devices, and filling the holes with metal; and

separating individual bulk acoustic resonator devices by sawing the composite wafer.

16. (New) A method as claimed in claim 15, wherein each of the bulk acoustic resonator devices comprises a piezoelectric layer sandwiched between two metal electrodes.

17. (New) A method as claimed in claim 15, wherein a third wafer is bonded to the second surface of the first wafer in the step of forming the composite wafer.

18. (New) A method as claimed in claim 15, wherein the step of forming the composite wafer is performed under a vacuum.

19. (New) A method as claimed in claim 15, wherein the step of forming the composite wafer uses anodic bonding employing a borosilicate bonding layer.

20. (New) A method as claimed in claim 15, wherein the step of forming the composite wafer employs a glass as the bonding layer and the bond is made by a combination of heat and pressure.

21. (New) A method as claimed in claim 15, wherein the step of forming the composite wafer employs a metal or alloy as the bonding layer and the bond is made by a combination of heat and pressure.

22. (New) A bulk acoustic resonator device made by the method according to claim 15.

23. (New) A bulk acoustic resonator device according to claim 22 comprising a piezoelectric layer sandwiched between two metal electrodes.

24. (New) A bulk acoustic resonator device according to claim 23 comprising: a substrate, and a dielectric layer, one of the metal electrodes, the piezoelectric layer, and the other one of the metal electrodes that are stacked one by one on the substrate.

25. (New) A bulk acoustic resonator device according to claim 24, further comprising a top layer which can be either a conductor or an insulator.

Amendments to the Drawings:

The attached replacement drawing sheet makes changes to Figs. 8 and replaces the original sheet with Figs. 8-9.

Attachment: Replacement Sheet